

REMARKS

Applicant's attorney wishes to thank the Examiner for the courteous and helpful interview of March 11, 2004 during which the present claim amendments and the prior art were discussed.

Claim 37 has been amended to clarify the same, as discussed at the interview.

While claims 33-38 are present in this application, claims 33-36 are withdrawn from consideration. Only claims 37 and 38 are being presented and those two claims are rejected under 35 USC §102(b) as anticipated by the Barber reference (U.S. Patent No. 4,701,363).

For convenience, claim 37, as amended, and claim 38 are presented here. They are:

Claim 37. A method of forming a plurality of wiring lines on conductive material on a board having a core layer to form a printed circuit board, comprising:

- (a) forming said plurality of wiring lines on a surface of said core layer, having first and second portions, the plurality of wiring lines formed on said surface of said core having side walls of a uniform thickness in height relative to said surface of said core layer; and
- (b) etching the first portion of a first of said plurality of wiring lines, such that the first portion has a planar surface completely across said first portion, joining said side walls, and is thinner in height relative to said surface of said core layer than the second portion.

Claim 38. The method as claimed in Claim 37, wherein a second of said plurality of said wiring lines is provided, spaced from said first wiring line of said plurality of wiring lines having said first and second portions, said second wiring line having third and fourth portions, and etching said second wiring line such that the third portion is thinner in height relative to said surface of said core layer than the fourth portion.

Reconsideration and removal of the rejection of claims 37 and 38 are respectfully requested in view of the previous arguments and the following remarks.

In the Final Office action dated December 31, 2004, the Office Action states that:

“Barber discloses in Fig. 7 of etching to form depressions 25 on leads. Fig. 9 shows the first portion is planar.”

Applicants claims require that a step is provided of etching a first of said plurality of wiring lines, and that the first portion has a planar surface completely across said first portion, which joins with side walls of the first portion, and is thinner in height relative to said surface of said core layer than the second portion. By such a step, a printed circuit board is produced with reduced crosstalk noise generated between adjacent two of a plurality of wiring lines spaced on a printed circuit board.

The Barber reference does not teach or suggest such a method.

Fig. 7 of Barber, referred to in the Final Office Action shows the following:

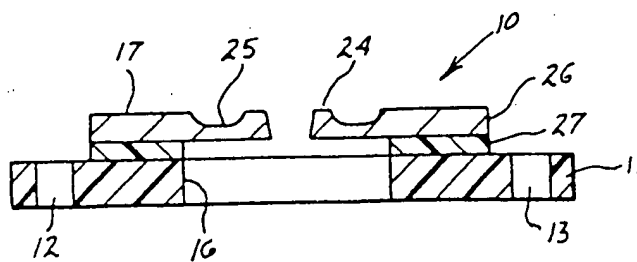


FIG-7

While Fig. 7 may suggest “etching to form depressions 25 on leads”, this is not sufficient to

allege unpatentability of Applicant's claimed method.

Fig. 9 of Barber is then referred to in the Final Office Action as showing "the first portion 43 is planar." Fig. 9 shows the following:

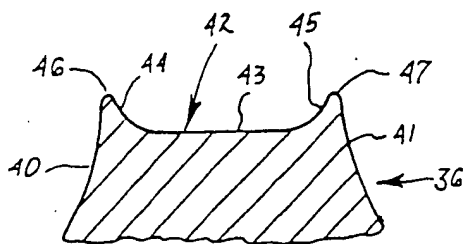
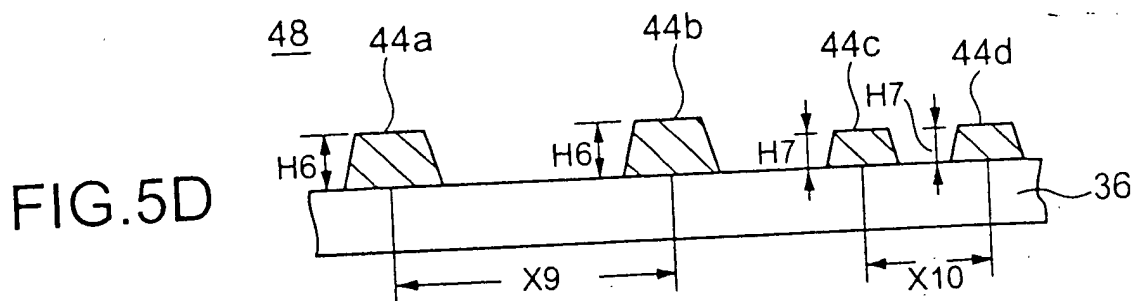


FIG - 9

While a portion of the depression 25 formed in the lead 17 may be formed by etching, there is no doubt that that depression is not such that a planar surface is formed completely across the depression that is formed. Figure 9 specifically shows a U-shaped configuration of the depression or web portion 43 across the lead with a central web 43 and legs 44 and 45 extending outwardly from the web 43 in the same direction until they meet the sides 40 and 41 at their free ends 46 and 47 (col. 9, lines 27-31). Although the Examiner noted that web 43 could be considered a first portion, that portion does not join with side walls of the lead.

In contrast, the present method produces wiring lines on a board as indicated in FIG. 5D as follows:



The U-shaped configuration is clearly shown in Fig. 9 and there is no teaching or suggestion of a first portion that has a planar surface completely across, which joins side walls of the first portion and which results in the advantages of a printed circuit board such as is provided by the present claimed method.

The claims now are clear as to the planar surface of the first portion extending completely across the same as to join the side walls of the first portion.

In view of the aforementioned amendment and accompanying remarks, claims 37 and 38 are believed to be patentable and in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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